Network Simulation

PacketStorm Communications, Inc. was founded in November 1998 by a group of engineers from the prestigious Bell Laboratories.
PacketStorm develops, manufactures, and supports high end testing solutions for the Internet Protocol (IP) communications market. PacketStorm is the market leader for advanced IP Network Emulators with dynamic and traffic conditioning emulation. PacketStorm sells test solutions through a global network of independent representatives and international distributors.

PacketStorm provides very competitive compensation including full benefits, profit sharing, and stock options. We are located five minutes from the beach, one hour from New York city, and one and a half hours from Philadelphia.

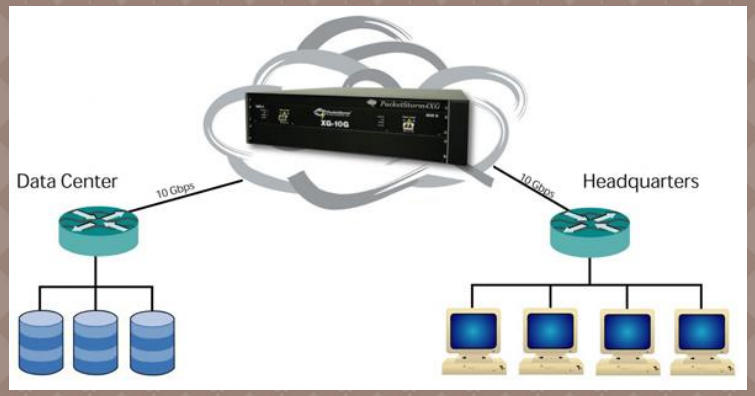
Network Emulation

The Internet, private wide area networks, and cloud services represent some of the aspects that connect the user to their application. As users demand faster response and more complex data from their applications, the networks carrying this data are under greater pressure to meet these expectations. To truly test out applications before rolling it out to the users, network emulation must be used. Network emulation is also referred to as wan emulation.

Network emulation is used by manufacturers, service providers, and applications developers to verify the robustness of their network product or application. A wan emulator recreates the real world effects seen in the network. Standard features of a network emulator include filtering, impairments, modifiers, and routing.

Filtering allows the wan emulator to separate traffic into different groups to represent different networks. Therefore, a network emulator emulates multiple network scenarios between two emulator ports. Even though end devices are only feet apart and connected to the same server through the emulator, device “A” and device “B” could be viewed to be on different sides of the world by the server.

4XG IP Network Emulator



Features
- 20 Gbps Architecture
- 10 Gbps Module
- 1 Gbps Module
- Easy-to-use GUI
- Impairments
- Packet Filtering
- Impair IP and non-IP traffic

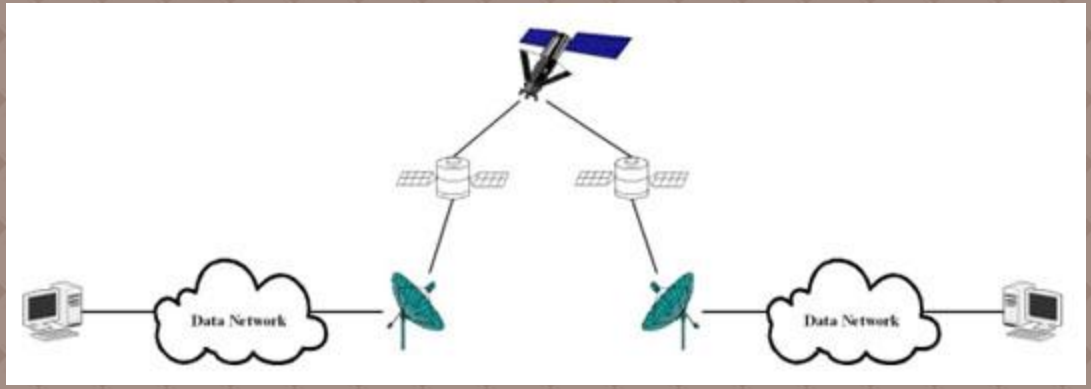
Applications
- Storage
- Video
- efense
- Network Security
- Carriers
- Manufacturers

The PacketStorm4XG IP network emulator provides WAN emulation for multiple 1Gbps and 10Gbps ports. The PacketStorm4XG has over 32 million packets per second throughout. Up to two 10Gbps or sixteen 1Gbps ports can be installed in one chassis. The PacketStorm4XG impairs IP and non-IP traffic.

The PacketStorm4XG IP network emulator reproduces the unfavorable conditions of IP networks and WANs in a controllable and repeatable lab setting. Any incoming packet can be impaired and routed to any other port to emulate a network mesh. The 4XG supports either a two port 10 Gigabit Ethernet module or a sixteen port1 Gigabit Ethernet module. The 1 Gigabit Ethernet module is selectable in two port increments.

Satellite

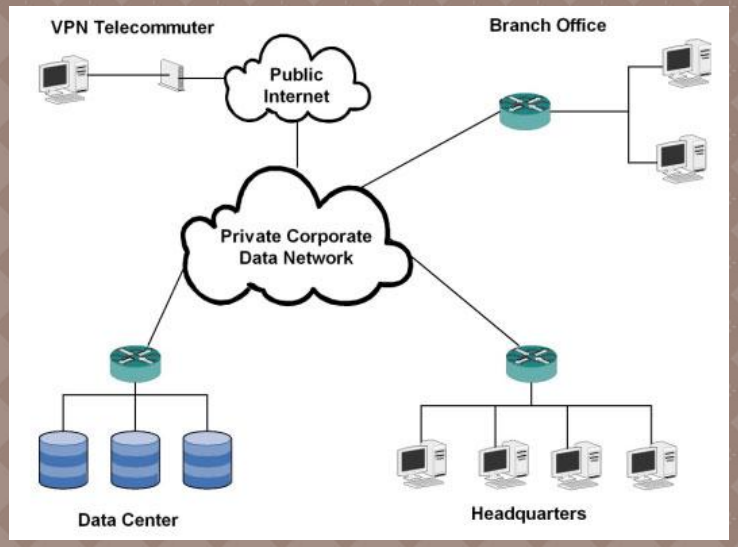
In the past, satellite links have been used for international telecommunications and broadcasting. Recently, there's been a surge in sending Internet Protocol packets over satellite networks. These packets may carry voice, video, or data information. New applications include: military, security, satellite radio, satellite phones, satellite TV, disaster recovery, branch office communications, distance learning, video conferencing, and telematics services.



The figure above illustrates a simple satellite network. The data network clouds could be a LAN or a WAN. The network of three satellites can be viewed as another WAN cloud since they will cause impairments to occur such as delay, jitter, packet loss, and bit errors. Therefore for end to end transmission between the PC's, packets will transverse three network clouds. These new digital satellite applications can be divided into two groups: UDP (User Datagram Protocol) and TCP (Transmission Control Protocol). UDP is a connectionless protocol with few error recovery mechanisms.

Storage

There's been an incredible growth in storage requirements in recent years by new data applications, e-mail, the Internet, and new government regulations. In the past, corporations would use direct attached storage, islands of storage for each server. In recent years, corporations are consolidating their data center storage to create a Storage Area Network (SAN). SANs enable multiple servers to gain access to the same storage. SAN's are typically based on fiber channel. Fiber channel is a protocol designed for high performance block data transfer with very low latencies. Today, more companies want to extend the benefits of SANs over Internet Protocol (IP) networks to enable more users to access data.



Network Attached Storage (NAS) devices allow companies to attach scalable storage directly to existing LAN network infrastructure providing lower cost and easier maintenance. Two methods are Fiber Channel over IP (FCIP) and Internet SCSI (iSCSI). Both standards are targeted at moving block-level data over IP networks, while also leveraging the large installed base of IP networking infrastructures for remote data access.

Testimonials

Nuasis needed serious testing equipment… and chose PacketStorm.

"Nuasis NuContact Center is the IP based contact center solution manufactured by Nuasis Corporation in Mountain View, CA. This totally IP-based multimedia offering provides Nuasis' customers a highly reliable and scalable architecture to manage multiple sites as if they were one large call center. Nuasis Corporation relies on PacketStorm Communications' network emulation test tools to ensure the quality of their products."

PacketStorm test equipment a key component of business success

"As a professor at Penn State and also a key principal in a private data networking consulting form, it is absolutely essential that the tools that Dr. Phil Hippensteel relies on are accurate and reliable. Dr. Hippensteel relies on PacketStorm Communications test equipment for his network emulation requirements."

LeftHand Networks uses PacketStorm for Disaster Recovery scenarios

"LeftHand Networks uses PacketStorm's IP Network Emulators in our test lab to simulate repeatable WAN conditions, allowing us to reliably profile real-world customer Disaster Recovery scenarios. Our test engineers and developers consider the PacketStorm solution an essential tool for network transport analysis, which in turn helps us provide LeftHand customers a better open iSCSI SAN solution with accurate performance characterizations."

For more information please visit

http://www.packetstorm.com

PacketStorm Communications, Inc.
20 Meridian Road
Eatontown, NJ 07724
Phone: 732-544-2434
Fax: 732-544-2437